

REPORT
OF THE
DEPARTMENT OF HEALTH
OF THE
PANAMA CANAL
FOR THE
MONTH OF AUGUST, 1915

CHAS. F. MASON

Lieut. Colonel, Medical Corps, United States Army
Chief Health Officer, Balboa Heights, Canal Zone

Gift of the Panama Canal Museum

WASHINGTON
1915

REPORT
OF THE
DEPARTMENT OF HEALTH
OF THE
PANAMA CANAL
FOR THE
MONTH OF AUGUST, 1915

CHAS. F. MASON

Lieut. Colonel, Medical Corps, United States Army
Chief Health Officer, Balboa Heights, Canal Zone

WASHINGTON
1915



CONTENTS.

	Page.
Letter of transmittal.....	5
General remarks.....	5
Vital statistics:	
Health of employees.....	6
Health of residents of Canal Zone.....	6
Health of residents of the city of Panama.....	6
Health of residents of the city of Colon.....	6
Hospital division:	
Ancon Hospital.....	7
Insane department.....	7
Chronic ward.....	8
Colon Hospital.....	8
Palo Seco Leper Asylum.....	8
Santo Tomas Hospital.....	8
District dispensaries.....	8
Sanitary division:	
Canal Zone.....	8
Panama.....	8
Colon.....	9
Quarantine division:	
Panama.....	10
Colon.....	10
Statistical tables:	
Table I. Admissions, deaths, and noneffective rates for employees; deaths of residents of Panama, Colon, and the Canal Zone.....	10
II. Deaths by age, color, and sex.....	12
III. Deaths by nationality.....	12
IV. Deaths of white Americans.....	13
V. Causes of deaths of employees.....	13
VI. Causes of deaths of civil population (employees and nonem- ployees) and military and places where chargeable.....	14
VII. Admissions and deaths in the hospitals of the Panama Canal..	16
VIII. Consolidated hospital report.....	30
IX. Consolidated dispensary and admission report.....	32
X. Employees: Constantly sick and noneffective rates per 1,000....	34
XI. Employees: Days' treatment per admission, hospitals and quarters.....	34
XII. Financial statement.....	35
XIII. Ancon Hospital.....	36
XIV. Colon Hospital.....	41
XV. Palo Seco Leper Asylum.....	42
XVI. Santo Tomas Hospital.....	42
XVII. Sanitary work done in Canal Zone, Panama, and Colon.....	45
XVIII. Quarantine transactions.....	47
XIX. Issues of quinine.....	49
XX. Personnel report.....	49



LETTER OF TRANSMITTAL.

THE PANAMA CANAL, CANAL ZONE,
HEALTH DEPARTMENT,
Balboa Heights, September 13, 1915.

Lieut. Col. CHESTER HARDING,
*Acting Governor of the Panama Canal,
Balboa Heights, Canal Zone.*

SIR: I have the honor to submit the following report of the operations of the department of health for the month of August, 1915.

Very respectfully,

CHAS. F. MASON,
Chief Health Officer.

GENERAL REMARKS.

No cases of yellow fever, smallpox, or plague have originated on or were brought to the Isthmus during the month.

VITAL STATISTICS.

EMPLOYEES.

The health of the employees remained good during the month. The number of names on the rolls for the preceding month was 36,024.

The total number of admissions to hospitals and quarters was 1,007, a rate of 335.44 per thousand, as compared with 389.22 for the preceding month, and 367.62 for the corresponding month of last year.

The total number of deaths from all causes was 17; of these, 12 died from disease, or 3.99 per thousand, as compared with 3.34 for the preceding month and 3.26 for the corresponding month of last year.

The constantly noneffective rate was 10.22, compared with 10.71 for the preceding month and 11.32 for the corresponding month of last year.

The total admission rate for malaria, hospitals and quarters, was 72.28, compared with 101.39 for last month and 89.73 for the corresponding period of last year, and the total noneffective rate 1.63, compared with 1.94 for last month and 1.95 for August, 1914. Malaria caused 21 per cent of all admissions to hospitals and quarters. Sixteen per cent of the total noneffective rate was caused by malaria. The diseases next to malaria causing the highest admission rates, in the order of their numerical importance, were: Diseases of the digestive system, venereal diseases, and diseases of the respiratory and circulatory systems. These five classes of diseases caused 55 per cent of all admissions to hospitals.

The admission rate for typhoid fever was 0.33, while the rate for the previous month was 0 and for the corresponding period of last year 0.27.

EFFECTS OF RACE.

The admission rate to hospitals and the death rate for disease for black employees were 169.35 and 3.44 per thousand, as compared with 432.45 and 7.77 for white employees. The noneffective rate for disease and injuries for black employees per thousand was 8.50, as compared with 21.87 for white employees.

The admission rate to hospitals and quarters for malaria was 55.81 per thousand for blacks, as compared with 183.86 for whites.

The death rate among Americans was 5.78, and the admission rate to hospitals for disease was 291.91. The admission rate for malaria to hospitals and quarters was 147.40 for Americans.

DEPORTATIONS.

There were 6 deportations accomplished during the month, all of whom were employees; for disease 2, and for injury 4.

CANAL ZONE.

The population of the Canal Zone is 30,219, among whom there was a total of 50 deaths. Of these, 46 deaths were for disease, giving a rate of 18.26 per thousand, as compared with 11.58 for the preceding month and 16.23 for the corresponding month of last year. Of the total deaths from disease the percentage under 5 years was 50, compared with 38 last month.

There were 59 births reported, giving a rate of 23.42 per thousand. Of these births 15 were of white and 44 of colored children. There were 18 deaths of children under 1 year of age, 2 white and 16 colored, giving an infant mortality of 133 for white and 364 for colored children, with a general average of 305. The percentage of stillbirths to total births was 5.

PANAMA CITY.

The population of the city is 60,373, among whom there was a total of 149 deaths; of these, 146 deaths were from disease, giving a rate of 29.02 per thousand, as compared with 25.24 for the preceding month and 23.55 for the corresponding month of last year. Of the total deaths from disease the percentage under 5 years of age was 49, compared with 59 last month. The principal causes of death showing an increase as compared with July were: Malaria, 6, as against 1 last month; tuberculosis, 25, as compared with 17 for the preceding month; and lobar pneumonia, 6, as against 2 for the month of July.

There were 274 births reported, giving a rate of 54.46 per thousand. The infant mortality was 161 per thousand. The percentage of stillbirths to total births was 6.

COLON.

The population of the city is 29,331, among whom there were 54 deaths; of these, 51 deaths were from disease, giving a rate of 20.86,

as compared with 24.14 for the preceding month and 22.54 for the corresponding month of last year. Of the total deaths from disease the percentage under 5 years was 51, compared with 51 last month.

The principal causes of death showing an increase as compared with July were: Dysentery 1, as against none last month; pneumonia 4, as compared with 3 for the preceding month; gastritis 2, as compared with none for the month of July.

There were 55 births reported, giving a rate of 22.50 per thousand. The infant mortality was 327 per thousand. The percentage of stillbirths to total births was 2.

HOSPITAL DIVISION.

ANCON HOSPITAL.

During the month the average number of patients constantly in hospital was 470.44. The per capita cost of patients in hospital proper was \$1.988 gross and \$0.984 net. The net per capita cost of patients in the insane asylum was \$0.377.

INSANE DEPARTMENT.

Thirteen patients were admitted for mental observation during the month, 5 of whom had been committed to the institution for that purpose in former years. Fifteen of the 17 patients discharged had recovered full possession of their mental faculties or were found not to be insane after repeated and thorough examinations, and the other 2 were deported in an unimproved condition to the Dutch West Indies and the United States.

Two deaths occurred among the insane female population.

There were no admissions of the physically disabled to the farm department in the month, but 3 of this class of inmates were discharged at their own request, and 1 of these was deported by the Panama Canal to his home in Jamaica.

On the 21st instant authority was granted for the consolidation of the Corozal Hospital for the Insane and the hospital farm at Corozal, which hereafter will be operated under the name of Corozal Hospital.

The principal object of this merger was to concentrate administration and jurisdiction, to simplify accounting and to place the hospital on the same basis as those insane institutions in the United States carrying on occupational treatment and farm operations conjointly.

Construction work done by the mentally affected patients, such as grading the grounds, setting out trees, plants, hedges, etc., continues with gratifying results, and those thus employed are noticeably quiet, contented, and healthy.

The dairy, piggery, poultry yard, and garden are being operated with profit to the institution. During the coming month 500 White Leghorn and Rhode Island pullets will be received from the States to replace an equal number of hens at this place the usefulness of which has practically ended through age, thus necessitating their disposal by marketing.

CHRONIC WARD.

There were 24.58 chronic and incurable patients constantly cared for during the month. The cost per patient per day was \$0.265. Detailed statistics are shown in Table XIII.

COLON HOSPITAL.

The average number of employees constantly sick was 40.91. The average number of days' treatment per employee was 7.68. The per capita cost of patients was \$2.42 gross and \$1.72 net. Detailed statistics are shown in Table XIV.

PALO SECO LEPROSY ASYLUM.

The number of patients under treatment at the end of the month was 57, compared with 56 for the preceding month. Detailed statistics are shown in Table XV.

SANTO TOMAS HOSPITAL.

During the month a total of 1,334 patients was treated, 63 less than for the preceding month. The daily average of patients in hospital was 448, as compared with 443 for July, and the total number of hospital days was 13,891, as compared with 13,746 for the preceding month. A total of 87 deaths have occurred, with tuberculosis, malaria, organic disease of heart, and measles the chief causes, in the order named.

Detailed statistics are shown in Table XVI.

DISTRICT DISPENSARIES.

The dispensary having the highest admission rate for malaria was Gatun, with an average weekly percentage of 1.06; that having the lowest was Ancon, with a percentage of 0.09.

Detailed statistics are shown in Table IX.

SANITATION—CANAL ZONE.

The following communicable diseases were reported during the month:

Measles.....	9
Typhoid fever.....	1
Mumps.....	3
Diphtheria.....	2
Malarial fever.....	194
Tuberculosis.....	14
Whooping cough.....	6
Dysentery.....	2
Rubella (rotheln).....	1

Detailed statistics are shown in Table XVII.

SANITATION—PANAMA.

The favorable malarial conditions continued during the greater part of the month. One week there were no cases of malaria reported, thus attaining the zero mark for the first time. In the past few days, since the heavy rains began, anopheles larvæ have been found in increased numbers.

BUSH CUTTING.

In addition to the regular amount of grass cutting, an extra work gang of 25 men has been cutting the jungle on this side of the Curundu River. A few pools and what is believed to be an old river bed were discovered, which were ideal places for mosquito breeding.

VACCINATION.

The vaccination of school children has been completed, thus finishing the vaccinations for the whole city.

CONTAGIOUS DISEASE AMONG CHILDREN.

The greatly increased number of measles cases reported this month is due to the fact that every school was visited and all cases reported. Three of the leading physicians were fined \$25 each for failure to report infective diseases, and since then a great many more cases have been reported than in any previous month.

TOTAL INFECTIOUS DISEASES DURING MONTH.

The following communicable diseases were reported during the month:

Measles.....	241
Chicken pox.....	4
Pulmonary tuberculosis.....	16
Diphtheria.....	3
Whooping cough.....	4
Tubercular meningitis.....	1

Detailed statistics are shown in Table XVII.

SANITATION—COLON.

The department has been actively engaged in antimalarial work during the month, and has submitted a comprehensive plan for the elimination of breeding places in the entire district; this includes the swamp areas of Mount Hope, the large area extending from the Union Oil section to Camp Bierd, the extensive marsh lying south of the filter plant, known as Arcia's property, and the section west of the Margarita Island railroad.

It is planned to drain the marsh lands of the Arcia and the Margarita sections and admit the sea water; to dry fill the entire swamp area of Mount Hope; and to put a hydraulic fill in the Union Oil section.

Many improvements have been made in the stable district of Colon. One stable was condemned and demolished as being hopelessly insanitary. Many have undergone structural improvements with special reference to rat proofing, and the better policing of the district has made a noticeable reduction in the fly situation.

A plan of police cooperation for the reduction and abatement of nuisances has been inaugurated and a special patrolman has been detailed for duty with the inspector in charge of nuisance work. A marked effect upon the number of nuisances has been observed.

The following communicable diseases were reported during the month:

Mumps.....	26
Chickenpox.....	4
Malarial fever.....	4
Tuberculosis.....	6
Whooping cough.....	4

Detailed statistics are shown in Table XVII.

QUARANTINE SERVICE.

The work of the division has been conducted without special incident during the month. There have been no fresh developments in the quarantine situation on the west coast of South America, with the exception of the appearance of plague at Coquimbo, Chile.

The fence inclosing the Balboa quarantine reservation has been completed with the exception of the gates. Some planting of trees and shrubs has been done under the supervision of the horticulturist of the quartermaster's department. The quarantine pier is still in process of construction but almost complete.

No disease of a quarantinable nature arrived at our ports during the month.

Detailed statistics are shown in Table XVIII.

TABLE I.—ADMISSIONS, DEATHS, AND NONEFFECTIVE RATES FOR EMPLOYEES; DEATHS OF RESIDENTS OF PANAMA, COLON, AND THE CANAL ZONE.

ABSOLUTE NUMBERS.

Color.	Number of employees.	Admissions to hospitals.			Deaths.			Noneffective from sickness.	
		Total.	Disease.	Ex-ternal causes.	Total.	Disease.	Ex-ternal causes.	Days treated.	Con-stantly non-effective.
<i>August, 1915.</i>									
White.....	4,634	167	142	25	3	3	.....	3,141	101.32
Colored.....	31,390	443	333	110	14	9	5	8,276	266.96
Total....	36,024	610	475	135	17	12	5	11,417	368.28
<i>July, 1915.</i>									
White.....	4,774	207	183	24	3	3	.....	3,181	102.60
Colored.....	31,207	519	400	119	14	7	7	8,771	282.92
Total....	35,981	726	583	143	17	10	7	11,952	385.52
<i>August, 1914.</i>									
White.....	6,838	238	204	34	3	3	.....	3,869	124.81
Colored.....	37,294	550	398	152	21	9	12	11,619	374.80
Total....	44,132	788	602	186	24	12	12	15,488	499.61

TABLE I.—ADMISSIONS, DEATHS, AND NONEFFECTIVE RATES FOR EMPLOYEES; DEATHS OF RESIDENTS OF PANAMA, COLON, AND THE CANAL ZONE—Continued.

PROPORTIONATE NUMBERS.¹

Color.	Number of employees.	Admissions to hospitals.			Deaths.			Noneffective from sickness.	
		Total.	Disease.	Ex-ternal causes.	Total.	Disease.	Ex-ternal causes.	Days treated.	Con-stantly non-effective.
<i>August, 1915.</i>									
White.....	4,634	432.45	367.71	64.74	7.77	7.77	.....	.....	21.87
Colored.....	31,390	169.35	127.30	42.05	5.35	3.44	1.91	.....	8.50
Total....	36,024	203.19	158.22	44.97	5.66	3.99	1.67	.....	10.22
<i>July, 1915.</i>									
White.....	4,774	520.32	460.00	60.32	7.54	7.54	.....	.....	21.49
Colored.....	31,207	199.57	153.81	45.76	5.37	2.68	2.69	.....	9.06
Total....	35,981	242.12	194.43	47.69	5.67	3.34	2.33	.....	10.71
<i>August, 1914.</i>									
White.....	6,838	417.66	358.00	59.66	5.26	5.26	.....	.....	18.25
Colored.....	37,294	176.97	128.06	48.91	6.76	2.90	3.86	.....	10.25
Total....	44,132	214.27	163.69	50.58	6.52	3.26	3.26	.....	11.32

Place.	Popu- lation.	Deaths.			Annual average per 1,000.		
		Total.	Dis- ease.	Ex- ternal causes.	Total.	Dis- ease.	Ex- ternal causes.
<i>August, 1915.</i>							
Panama.....	60,373	149	146	3	29.61	29.02	0.59
Colon.....	29,331	54	51	3	22.08	20.86	1.22
Canal Zone.....	30,219	50	46	4	19.85	18.26	1.59
Total.....	119,923	253	243	10	25.31	24.31	1.00
<i>July, 1915.</i>							
Panama.....	60,373	129	127	2	25.64	25.24	.40
Colon.....	29,331	61	59	2	24.95	24.14	.81
Canal Zone.....	30,057	37	29	8	14.77	11.58	3.19
Total.....	119,761	227	215	12	22.74	21.54	1.20
<i>August, 1914.</i>							
Panama.....	62,172	133	122	11	25.67	23.55	2.12
Colon.....	20,232	39	38	1	23.13	22.54	.59
Canal Zone.....	37,702	60	51	9	19.10	16.23	2.86
Total.....	120,106	232	211	21	23.18	21.08	2.10

¹ Annual average, per 1,000.

TABLE II.—DEATHS BY AGE, COLOR, AND SEX.

Age.	White.			Colored.			Yellow.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year.....	10	4	14	35	29	64	1	1	2	46	34	80
1 to 4 years.....	5	.....	5	19	17	36	.....	.....	.....	24	17	41
5 to 10 years.....	.....	.....	.....	3	.....	3	.....	.....	.....	3	.....	3
11 to 20 years.....	.....	.....	.....	6	2	8	.....	.....	.....	6	2	8
21 to 30 years.....	2	1	3	18	15	33	1	.....	1	21	16	37
31 to 40 years.....	6	1	7	21	11	32	1	.....	1	28	12	40
41 to 50 years.....	3	1	4	10	8	18	1	.....	1	14	9	23
51 to 60 years.....	3	1	4	3	2	5	.....	.....	.....	6	3	9
61 to 70 years.....	2	1	3	5	2	7	.....	.....	.....	7	3	10
71 to 80 years.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	1
Not stated.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	1
Total.....	31	9	40	121	87	208	4	1	5	156	97	253

TABLE III.—DEATHS BY NATIONALITY.

Nations.	Employees.	Nonem- ployees.	Total.
Antigua.....	1	3	4
Barbados.....	3	37	40
British Guiana.....	.....	1	1
China.....	.....	6	6
Colombia.....	.....	5	5
Dominica.....	1	.....	1
England.....	.....	1	1
Ecuador.....	.....	1	1
France.....	.....	3	3
Grenada.....	.....	3	3
Guadeloupe.....	2	2	4
Italy.....	.....	2	2
Jamaica.....	1	49	50
Martinique.....	1	5	6
Mexico.....	.....	1	1
Montserrat.....	.....	2	2
Nicaragua.....	.....	1	1
Panama.....	2	93	95
Spain.....	1	5	6
St. Kitts.....	1	.....	1
St. Lucia.....	.....	5	5
St. Thomas.....	1	.....	1
Sweden.....	.....	1	1
Trinidad.....	1	1	2
United States.....	2	5	7
West Indies.....	.....	1	1
Unknown.....	.....	3	3
Total.....	17	236	253

TABLE IV.—DEATH RATE AMONG AMERICANS ON THE ISTHMUS CONNECTED WITH THE PANAMA CANAL.

	Number of deaths.	Annual average per 1,000.
White employees from the United States (4,152):		
Disease.....	2	5.78
External causes.....		
All causes.....	2	5.78
White women and children from the United States (3,462):		
Disease.....	1	3.47
External causes.....		
All causes.....	1	3.47
White employees and their families from the United States (7,614):		
Disease.....	3	4.73
External causes.....		
All causes.....	3	4.73
Total number of Americans on the Canal Zone (11,403):		
Disease.....	4	3.33
External causes.....	1	.83
All causes.....	5	4.16

TABLE V.—CAUSES OF DEATHS OF EMPLOYEES OF THE PANAMA CANAL AND PANAMA RAILROAD COMPANY.

Causes of death.	White.	Colored.	Total.
Disease:			
Acute alcoholism.....	1		1
Cause of death not specified.....		1	1
Chronic nephritis.....		1	1
Endocarditis, malignant.....		1	1
Hemoglobinuric fever, unqualified.....	1		1
Organic disease of heart.....		1	1
Pneumonia, lobar.....	1	2	3
Purulent infection and septicaemia.....		1	1
Tetanus.....		1	1
Tuberculosis, disseminated.....		1	1
External causes:			
Railroad traumatism.....		1	1
Traumatism by fall.....		1	1
Traumatism by firearms.....		1	1
Traumatism by other crushings.....		2	2
Total.....	3	14	17

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE.

Disease.	Pana- ma.	Colon.	Canal Zone.	Total.
<i>General diseases.</i>				
Malaria fever, estivoautumnal.....	6	.....	1	7
Measles.....	3	.....	.....	3
Diphtheria and croup.....	.....	1	.....	1
Dysentery.....	1	.....	.....	1
Chicken pox.....	.....	1	.....	1
Hemoglobinuric fever, unqualified.....	.....	.....	1	1
Yaws.....	1	.....	.....	1
Purulent infection and septicemia.....	1	.....	1	2
Tetanus.....	1	.....	.....	1
Pellagra.....	3	.....	.....	3
Beriberi.....	.....	1	.....	1
Tuberculosis of the lungs.....	20	5	3	28
Tuberculous meningitis.....	2	.....	.....	2
Abdominal tuberculosis.....	.....	.....	1	1
Disseminated tuberculosis.....	3	.....	.....	3
Syphilis, tertiary.....	1	.....	.....	1
Syphilis, period not stated.....	1	.....	.....	1
Cancer and other malignant tumors of the stom- ach and liver.....	1	.....	.....	1
Cancer and other malignant tumors of other organs and of organs not specified.....	1	.....	.....	1
Anemia, primary, pernicious.....	1	1	.....	2
Anemia, secondary, cause not determined.....	1	.....	.....	1
Alcoholism (acute or chronic).....	1	.....	.....	1
Alcoholism, acute.....	.....	.....	1	1
Drug habit.....	.....	1	.....	1
<i>Diseases of the nervous system and of the organs of special sense.</i>				
Simple meningitis.....	.....	1	.....	1
Cerebral hemorrhage, apoplexy.....	2	1	.....	3
Paralysis without specified cause.....	1	.....	1	2
Convulsions (nonpuerperal), (5 years and over).....	.....	.....	1	1
Convulsions of infants (under 5 years of age).....	.....	1	2	3
<i>Diseases of the circulatory system.</i>				
Pericarditis.....	1	.....	.....	1
Malignant endocarditis.....	.....	1	.....	1
Organic diseases of the heart.....	6	3	3	12
Angina pectoris.....	1	.....	.....	1
Aneurysm.....	.....	1	1	2
Arteriosclerosis.....	1	.....	.....	1
<i>Diseases of the respiratory system.</i>				
Myiasis of nasal fossæ and sinuses.....	1	.....	1	2
Acute bronchitis.....	7	5	1	13
Chronic bronchitis.....	1	.....	.....	1
Broncho-pneumonia.....	11	.....	3	14
Pneumonia (unqualified).....	1	1	.....	2
Lobar pneumonia.....	6	3	4	13
Pleurisy.....	1	.....	.....	1
Gangrene of the lungs.....	.....	.....	1	1
Asthma.....	1	.....	.....	1

TABLE VI.—CAUSES OF DEATHS OF CIVIL POPULATION (EMPLOYEES AND NONEMPLOYEES) AND MILITARY AND PLACES WHERE CHARGEABLE—Continued.

Diseases.	Pana- ma.	Colon.	Canal Zone.	Total.
<i>Diseases of the digestive system.</i>				
Diseases of the pharynx.....	1			1
Acute gastritis.....		1		1
Chronic gastritis.....		1		1
Acute indigestion.....	1			1
Diarrhea and enteritis (2 years and over).....	24	6	2	32
Colitis.....	6		1	7
Diarrhea and enteritis (2 years and over).....	1			1
Colitis.....	2	1		3
Ankylostomiasis.....	1			1
Other hernias.....	1			1
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>				
Acute nephritis.....	2		1	3
Bright's disease (chronic nephritis).....	6	2	4	12
Other diseases of the kidneys and annexa.....	2			2
<i>The puerperal state.</i>				
Puerperal hemorrhage.....		1		1
Puerperal septicemia.....	1			1
<i>Diseases of the skin and of the cellular tissue.</i>				
Pemphigus contagiosus.....	1			1
<i>Diseases of early infancy.</i>				
Newborn child.....			1	1
Congenital debility, icterus, and sclerema.....		1		1
Premature birth.....		2	2	4
Congenital debility.....	2	1	3	6
Malnutrition.....	2	4	5	11
Other causes peculiar to early infancy (including various consequences of labor).....	3			3
<i>Affections produced by external causes.</i>				
Burns (conflagration excepted).....	1			1
Accidental drowning.....			1	1
Traumatism by firearms.....		1		1
Traumatism by fall.....			1	1
Traumatism by other crushings (vehicles, rail-roads, landslides, etc.).....		1	1	2
Railroad traumatism.....		1		1
Homicide by firearms.....	1			1
Other external violence.....	1		1	2
<i>Ill-defined diseases.</i>				
Cause of death not specified or ill defined.....	1	4		5
Infections of undetermined origin.....			1	1
Total.....	149	54	50	253
Stillbirths.....	18	1	3	22
Grand total.....	167	55	53	275

TABLE VII.—TABLE SHOWING ADMISSIONS AND DEATHS

Diseases.	Ancon Hospital.										
	Employees.						Nonemployees.				
	Admissions.			Deaths.			Admissions.			Deaths.	
	White.			White.			White.			White.	
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.
<i>General diseases.</i>											
Typhoid fever.....			1					3	1		
Malaria:											
Estivo-autumnal.....	9	7	79				4	3	27		1
Tertian.....	4		6				3		2		
Quartan.....			1								
Clinical.....	4	7	22				4	3	3		
Smallpox: Vaccinia.....								1			
Measles.....			3				2	1	5		
Diphtheria and croup.....	1								2		1
Influenza.....			2				4				
Dysentery:											
Entamoebic.....			1				1				
Bacillary.....									1		
Unclassified.....			1								
Mumps.....			12								
Hemoglobinuric fever, un-											
qualified.....		1	1		1						
Kala-azar.....		1									
Acute infectious jaundice											
(Weil's disease).....							1				
Purulent infection and											
septicemia.....						1		1			1
Tetanus.....			1			1					
Pellagra.....									1		
Beriberi.....											
Tuberculosis of the lungs...	1	1	11				1	1	4	1	4
Tuberculous meningitis.....									1		1
Abdominal tuberculosis.....									1		
Tuberculosis of bones and											
joints.....			1								
Tuberculosis of the genito-											
urinary organs.....											
Tuberculous abscess.....			1								
Disseminated tuberculosis..						1			1		2
Syphilis:											
Primary.....							3				
Secondary.....	3	1					15		2		
Tertiary.....	1		5				2				
Period not stated.....									1		
Gonococcus infection.....		2						1			
Gonorrhea.....	3		2				9	3	1		
Gonorrheal bubo.....							1				

TABLE VII.—TABLE SHOWING ADMISSIONS AND DEATHS

Diseases.	Ancon Hospital.											
	Employees.						Nonemployees.					
	Admissions.			Deaths.			Admissions.			Deaths.		
	White.			White.			White.			White.		
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
<i>Diseases of the respiratory system.</i>												
Diseases of the nasal fossæ..	1	1	1				2	4	1			
Acute bronchitis.....	1		9					2	2			
Chronic bronchitis.....												
Broncho-pneumonia.....			1									
Lobar pneumonia.....		4	1	1			1	4				2
Pleurisy.....			1			1	1					
Gangrene of the lungs.....												1
Asthma.....												
Pulmonary emphysema.....							1					
Other diseases of the respiratory system (tuberculosis excepted).....	1											
<i>Diseases of the digestive system.</i>												
Diseases of the mouth and annexa.....									1			
Diseases of the teeth and gums.....	1											
Diseases of the pharynx.....			1				1					
Pharyngitis.....									1			
Follicular tonsilitis.....	6		2				2	7	1			
Ulcer of the stomach.....	1		1									
Other diseases of the stomach (cancer excepted).....												
Acute gastritis.....	1	1										
Chronic gastritis.....									1			
Acute indigestion.....								1				
Diarrhea and enteritis (under 2 years).....								2	1			
Colitis.....							1					1
Diarrhea and enteritis (2 years and over).....	1							1				
Colitis.....									1			1
Ankylostomiasis.....			2									
Intestinal parasites.....			2									
Acute appendicitis.....	2		1				2	1	1			
Chronic appendicitis.....	1						2	2				
Inguinal hernia.....	3		3				3	3				
Other hernias.....							1					
Intestinal obstruction.....							1					

TABLE VII.—TABLE SHOWING ADMISSIONS AND DEATHS

Diseases.	Ancon Hospital.											
	Employees.						Nonemployees.					
	Admissions.			Deaths.			Admissions.			Deaths.		
	White.			White.			White.			White.		
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
<i>Diseases of the digestive system—Continued.</i>												
Other diseases of the intestines.....	7						1	3				
Constipation.....	2						1	4	2			
Cirrhosis of the liver.....			2									
Other diseases of the liver.....								1	1			
Abscess of liver (unqualified).....												
Simple peritonitis (nonpuerperal).....								1				
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>												
Acute nephritis.....									2			
Bright's disease (chronic nephritis).....			1			1		1	3		1	3
Other diseases of the kidney and annexa.....								1				1
Pyelo-nephrosis.....			1									
Calculi of the urinary passages.....	1							1				
Cystitis.....	1	1						2	1			
Stricture of the urethra, nonvenereal.....			3					2				
Chronic prostatitis.....							1					
Abscess of the prostate.....			1									
Nonvenereal diseases of the male genital organs.....	1	1	8					1	1			
Hydrocele.....	1								2			
Uterine tumor (noncancerous).....									3			
Other diseases of the uterus.....	1							3	3			
Metritis.....								1				
Cysts and other tumors of the ovary.....								1	1			
Salpingitis and other diseases of the female genital organs.....								1	7			
Nonpuerperal diseases of the breast (cancer excepted).....								1				

IN THE HOSPITALS OF THE PANAMA CANAL—Continued.

Colon Hospital.												Total.											
Employees.						Nonemployees.						Employees.						Nonemployees.					
Admis- sions.			Deaths.			Admis- sions.			Deaths.			Admis- sions.			Deaths.			Admis- sions.			Deaths.		
W.			W.			W.			W.			W.			W.			W.			W.		
Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
...	...	1	...	...	...	...	1	...	...	...	...	7	...	1	...	...	...	1	4	...	...	...	...
...	...	1	...	...	...	...	...	1	...	...	...	2	...	2	...	...	...	1	4	3	...	...	...
...	1	1	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
...	1	...	...	...	...	...	...
...
...	2	...	...	...	...
...	1	...	...	1	...	1	3	...	1	3	...	...
...	1	...	...	...	...	1	...	...	...	1	...	...
...	1	1	...	...	...	1	3	1	...	...	...	...
...	3	...	...	...	2	...	...	...	...	...	...
...	1	...	...	1	...	...	...	...	...	...	...	...
...	...	1	...	...	...	...	...	...	...	...	...	1	1	9	...	...	1	1	2	...	...	...	...
...	1	...	...	...	...	...	...	3	4	...	...	...
...	1	...	...	...	...	1	...	...	...	...	...	3	1	...	...	...	...
...	1	1	...	...	...	...	...
...	1	7	...	...	...	...	...
...	1	...	...	...	...	...	...

TABLE VII.—TABLE SHOWING ADMISSIONS AND DEATHS

Diseases.	Ancon Hospital.											
	Employees.						Nonemployees.					
	Admissions.			Deaths.			Admissions.			Deaths.		
	White.			White.			White.			White.		
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
<i>The puerperal state.</i>												
Normal labor.....								11	3			
Accidents of pregnancy.....								1	1			
Abortion.....								3				
Puerperal hemorrhage.....												
Other accidents of labor.....												
Puerperal septicemia.....									1			
Puerperal albuminuria and convulsions.....												1
Following childbirth (not otherwise defined).....			1									
<i>Diseases of the skin and of the cellular tissue.</i>												
Gangrene.....			2						1			
Furuncle.....			1					1				
Carbuncle.....	1						1	1				
Acute abscess.....	1	3	2				3	1	2			
Phlegmon and cellulitis.....	2		1				1	3				
Dhobie itch.....		1										
Ulcer of the skin.....								1	1			
Impetigo contagiosa.....								3				
Ingrowing nail.....							1					
Other diseases of the skin and annexa.....	1	1	1				3	3	1			
<i>Diseases of the bones and of the organs of locomotion.</i>												
Diseases of the bones (tuberculosis excepted).....	1		1				1					
Periostitis.....									1			
Diseases of the joints (tuberculosis and rheumatism excepted).....			1									
Arthritis.....			3									
Amputations.....												
Other diseases of the organs of locomotion.....	1											
<i>Malformations.</i>												
Congenital malformations (stillbirth not included).....								1				

TABLE VII.—TABLE SHOWING ADMISSIONS AND DEATHS

Diseases.	Ancon Hospital.											
	Employees.						Nonemployees.					
	Admissions.			Deaths.			Admissions.			Deaths.		
	White.			White.			White.			White.		
	Americans.	Europeans.	Black.	Americans.	Europeans.	Black.	Soldiers.	Others.	Black.	Soldiers.	Others.	Black.
<i>Diseases of early infancy.</i>												
Newborn child.....								9	2			
Premature birth.....								1	1		1	1
Malnutrition.....									1			1
<i>Old age.</i>												
Senility.....								1				
<i>Affections produced by external causes.</i>												
Poisoning by food.....	1						2					
Other acute poisonings.....												
Burns (conflagration excepted).....			1									
Traumatism by firearms.....							1					
Traumatism by cutting or piercing instruments.....			45				1	2	4			
Traumatism by fall.....		1	1			1	2	1	1			
Traumatism by machines.....	1							1				
Traumatism by other crushings (vehicles, railroads, landslides, etc.).....												
Railroad traumatism.....			1									
Dynamite traumatism.....									1			
Injuries by animals.....							1					
Homicide by firearms.....								1			1	
Fractures (cause not specified).....	2		1				3		1			
Dislocations.....			2				1	1	2			
Sprains.....	1		2									
Other external violence.....	8	1	30				5	1	4			
<i>Ill-defined diseases.</i>												
Ill-defined organic disease.....								1	1			
Cause of death not specified or ill defined.....	1		1			1						
Infections of undetermined origin.....								2	2			1
No disease.....			2					10	7			
Total.....	89	34	344	2	1	7	122	152	154	1	6	25

TABLE VIII.—CONSOLIDATED HOSPITAL REPORT.

	Remaining Aug. 1.			Admitted.			Died.		
	A. ¹	F. ¹	B. ¹	A.	F.	B.	A.	F.	B.
ANCON HOSPITAL.									
Panama Canal employees.....	35	17	177	78	29	239	2	1	6
Panama Railroad employees.....	5	3	81	11	5	104	.....	.....	1
Other pay patients.....	86	33	52	206	47	114	2	3	14
Charity patients.....	9	3	35	10	9	30	1	1	9
Total.....	135	56	345	305	90	437	5	5	30
<i>Insane department.</i>									
Panama Canal employees.....		5	10	.....	.....	1	.....	.....	.....
Panama Railroad employees.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Panama pay patients.....	.....	13	163	.....	1	7	.....	.....	2
Other pay patients.....	4	2	1	1	.....	2	.....	.....	.....
Charity patients.....	4	3	49	.....	.....	1	.....	.....	.....
Total.....	8	23	225	1	1	11	.....	.....	2
Grand total.....	143	79	570	306	91	498	5	5	32
<i>Corozal farm.</i>									
Panama Canal employees.....	.....	10	42	.....	.....	1	.....	.....	.....
<i>Chronic ward.</i>									
Charity patients.....	.....	.....	26	.....	.....	3	.....	.....	.....
COLON HOSPITAL.									
Panama Canal employees.....	5	2	.....	16	12	59	.....	.....	1
Panama Railroad employees.....	.....	.....	13	14	2	40	.....	.....	2
Panama pay patients.....	.....	.....	.....	.....	.....	21	.....	.....	3
Other pay patients.....	.....	4	3	15	12	11	.....	.....	2
Charity patients.....	.....	.....	3	3	1	2	.....	.....	.....
Total.....	5	6	19	48	27	133	.....	.....	8
PALO SECO LEPER ASYLUM.									
Panama pay patients.....	.....	3	33	.....	.....	1	.....	.....	.....
Charity patients.....	.....	2	18	.....	.....	.....	.....	.....	.....
Total.....	.....	5	51	.....	.....	1	.....	.....	.....
GRAND TOTAL.									
Panama Canal employees.....	40	34	229	94	41	300	2	1	7
Panama Railroad employees.....	5	3	96	25	7	144	.....	.....	3
Panama pay patients.....	.....	16	196	.....	1	29	.....	.....	5
Other pay patients.....	90	39	56	222	59	127	2	3	16
Charity patients.....	13	8	131	13	10	36	1	1	9
Total.....	148	100	708	354	118	636	5	5	40

¹ A=white Americans; F=white foreign; B=black.

TABLE VIII.—CONSOLIDATED HOSPITAL REPORT—Continued.

	Dis- charged.			Trans- ferred.			Remain- ing Aug. 31.			Average number con- stantly sick.				
	A.	F.	B.	A.	F.	B.	A.	F.	B.	White.		Black.	Total.	
										American.	Foreign.			
ANCON HOSPITAL.														
Panama Canal em- ployees.....	89	26	274	.....	.....	5	22	19	131	29.81	16.61	150.74	197.16
Panama Railroad em- ployees.....	10	5	105	.....	.....	6	3	79	4.39	3.00	68.97	76.36	
Other pay patients.....	222	50	106	1	.....	3	67	27	43	81.06	30.16	48.26	159.48
Charity patients.....	16	6	29	.....	2	2	3	27	7.06	2.77	27.61	37.44	
Total.....	337	87	514	1	2	8	97	52	280	122.32	52.54	295.58	470.44	
Insane department.														
Panama Canal em- ployees.....	.....	.....	1	.....	.....	.....	5	10	.....	.....	5.00	9.45	14.45
Panama Railroad em- ployees.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2.00	2.00
Panama pay patients.....	.....	1	8	.....	.....	.....	13	160	.....	12.87	161.06	173.93	
Other pay patients.....	2	.....	.....	.....	.....	3	2	3	3.10	2.00	1.25	6.35	
Charity patients.....	.....	.....	3	.....	.....	2	4	3	45	4.00	3.00	47.29	54.29
Total.....	2	1	12	.....	.....	2	7	23	220	7.10	22.87	221.05	251.02
Grand total.....	339	88	526	1	2	10	104	75	500	129.42	75.41	516.63	721.46	
Corozal farm.														
Panama Canal em- ployees.....	.....	.....	5	.....	.....	.....	10	38	.....	10.00	39.22	49.22	
Chronic ward.														
Charity patients.....	.....	.....	4	.....	.....	.....	.....	25	.....	.....	24.58	24.58	
COLON HOSPITAL.														
Panama Canal em- ployees.....	18	9	30	.....	.....	16	3	5	12	3.54	3.12	6.16	12.82
Panama Railroad em- ployees.....	10	1	28	3	.....	19	1	1	4	2.41	.93	11.16	14.50
Panama pay patients.....	.....	6	.....	.....	11	.....	.....	1	.....	.....	1.29	1.29	
Other pay patients.....	9	8	9	.....	2	1	6	6	2	3.48	4.29	3.19	10.96
Charity patients.....	2	.....	4	1	.....	1	.....	1	.....	.64	.09	.64	1.37
Total.....	39	18	77	4	2	48	10	13	19	10.07	8.43	22.44	40.91	
PALO SECO LEPER ASYLUM.														
Panama pay patients.....	.....	.....	.....	.....	.....	.....	3	34	.....	3.00	33.57	36.57	
Charity patients.....	.....	.....	.....	.....	.....	.....	2	18	.....	2.00	18.00	20.00	
Total.....	.....	.....	.....	.....	.....	.....	5	52	.....	5.00	51.57	56.57	

TABLE VIII.—CONSOLIDATED HOSPITAL REPORT—Continued.

	Discharged.			Transferred.			Remaining Aug. 31.			Average number constantly sick.			
	A.	F.	B.	A.	F.	B.	A.	F.	B.	White.		Black.	Total.
										American.	Foreign.		
GRAND TOTAL.													
Panama Canal employees.....	107	35	310	...	...	21	25	39	191	33.35	34.73	205.57	273.65
Panama Railroad employees.....	20	6	133	3	...	19	7	4	85	6.80	3.93	82.13	92.86
Panama pay patients.....	...	1	14	...	...	11	...	16	195	...	15.87	195.92	211.79
Other pay patients.....	233	58	115	1	2	4	76	35	48	87.64	36.45	52.70	176.79
Charity patients.....	18	6	40	1	2	3	6	9	115	11.70	7.86	118.12	137.68
Total.....	378	106	612	5	4	58	114	103	634	139.49	98.84	654.44	892.77

Number of employees remaining in hospitals:

White.....	75
Colored.....	276
Total.....	351

TABLE IX.—CONSOLIDATED DISPENSARY REPORT.

EMPLOYEES TREATED IN QUARTERS, AND ALL CASES TREATED BUT NOT EXCUSED.

	Employees treated in quarters.														
	Remain- ing Aug. 1.		Ad- mitted.		Died.		Dis- charged.		Trans- ferred.		Remain- ing Aug. 31.		Days lost.		
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	Total.
Naos Island	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	2	.....	2
Ancon.....	4	.....	137	.....	.....	.....	133	.....	3	.....	5	.....	306	.....	306
Balboa.....	3	2	77	37	.....	.....	63	18	11	21	6	.....	183	74	257
Corozal.....	.....	1	31	.....	.....	.....	25	1	.....	.....	6	.....	96	2	98
Pedro Mi- guel.....	1	.....	11	.....	.....	.....	10	.....	.....	.....	2	.....	20	.....	20
Paraiso.....	1	2	19	29	.....	.....	13	26	6	5	1	.....	41	70	111
Gamboa.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gatun.....	1	2	14	12	.....	.....	13	13	.....	.....	2	1	40	23	63
Colon.....	12	20	78	41	.....	.....	78	43	1	1	11	17	320	404	724
Total .	22	27	368	119	.....	.....	336	101	21	27	33	18	1,008	573	1,581

TABLE IX.—CONSOLIDATED DISPENSARY REPORT—Continued.

EMPLOYEES TREATED IN QUARTERS, AND ALL CASES TREATED BUT NOT EXCUSED—Continued.

	All cases treated but not excused.								
	Employees.			Nonemployees.			Total.		
	W.	C.	Total.	W.	C.	Total.	W.	C.	Total.
Naos Island...	243	544	787				243	544	787
Ancon.....	2,500	3,721	6,221	1,607	2,296	3,903	4,107	6,017	10,124
Balboa.....	3,398	3,857	7,255	862	509	1,371	4,260	4,366	8,626
Corozal.....	987	1,383	2,370	802	170	972	1,789	1,553	3,342
Pedro Miguel..	644	1,116	1,760	738	256	994	1,382	1,372	2,754
Paraiso.....	668	2,401	3,069	457	933	1,390	1,125	3,334	4,459
Gamboa.....	60	171	231	35	461	496	95	632	727
Gatun.....	799	3,020	3,819	1,193	1,757	2,950	1,992	4,777	6,769
Colon.....	1,089	3,055	4,144	774	805	1,579	1,863	3,860	5,723
Total....	10,388	19,268	29,656	6,468	7,187	13,655	16,856	26,455	43,311

CONSOLIDATED ADMISSION REPORT.

	White.	Colored.	Total.
Total admissions to hospitals, excluding Corozal farm and chronic ward.....	472	632	1,104
Total admissions of employees to quarters.....	368	119	487
Total.....	840	751	1,591
Less number of patients transferred between hospitals, and from quarters to hospitals, whose admissions are duplicated in above figures.....	30	85	115
Net admissions to hospitals and quarters....	810	666	1,476
Net admissions to employees to hospitals and quarters.....	511	496	1,007
Annual average per thousand of admissions of employees to hospitals and quarters.....	1,323.26	189.61	335.44

CONTAGIOUS AND INFECTIOUS DISEASES REPORTED.

Diseases.	Panama.	Colon.	Canal Zone.	Total.
Measles.....	241		9	250
Typhoid fever.....			1	1
Mumps.....		26	3	2
Chicken pox.....	4	4		8
Diphtheria.....	3		2	5
Malarial fever.....		4	194	198
Tuberculosis.....	16	6	14	36
Whooping cough.....	4	4	6	14
Dysentery.....			2	2
Tubercular meningitis.....	1			1
Rubella (rotheln).....			1	1

TABLE X.—NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS AND QUARTERS.

	White.	Colored.	Total.
Hospitals:			
Ancon Hospital.....	58.81	231.16	289.97
Colon Hospital.....	10.00	17.32	27.32
Total.....	68.81	248.48	317.29
Quarters:			
Naos Island.....	.06	.....	.06
Ancon.....	9.87	.....	9.87
Balboa.....	5.90	2.39	8.29
Corozal.....	3.10	.06	3.16
Pedro Miguel.....	.65	.....	.65
Paraiso.....	1.32	2.26	3.58
Gatun.....	1.29	.74	2.03
Colon.....	10.32	13.03	23.35
Total.....	32.51	18.48	50.99

	Hospitals.	Quarters.	Total.
Average number of employees constantly sick:			
White.....	68.81	32.51	101.32
Colored.....	248.48	18.48	266.96
Total.....	317.29	50.99	368.28
Average number of employees constantly sick per 1,000:			
White.....	14.85	7.01	21.87
Colored.....	7.91	.59	8.50
Total.....	8.81	1.41	10.22

TABLE XI.—AVERAGE LENGTH OF STAY IN HOSPITALS OR QUARTERS FOR EACH ADMISSION OF SICK EMPLOYEES.

	White.	Colored.	Total.
Hospitals:			
Ancon Hospital.....	16.18	17.80	17.39
Colon Hospital.....	7.32	7.84	7.68
Quarters:			
Naos Island.....	2.00	.....	2.00
Ancon.....	3.24	.....	3.24
Balboa.....	2.30	2.15	2.25
Corozal.....	3.84	3.00	3.81
Pedro Miguel.....	3.30	.....	3.30
Paraiso.....	2.21	2.35	2.30
Gatun.....	3.08	1.77	2.42
Colon.....	4.53	14.25	8.01

TABLE XII.—FINANCIAL STATEMENT, DEPARTMENT OF HEALTH.

	July, 1915.	June, 1915.	July, 1914.
Administration: Chief health office.....	\$475. 12	\$747. 66	\$2, 046. 81
Hospital division:			
Ancon Hospital.....	25, 441. 84	25, 244. 94	39, 022. 14
Board of health laboratory.....	1, 551. 67	1, 670. 27	
Corozal farm.....	5, 553. 60	5, 625. 79	1, 535. 71
Chronic ward.....	254. 08	248. 93	240. 99
Colon Hospital.....	3, 042. 33	3, 398. 71	2, 438. 84
Palo Seco Leper Asylum.....	2, 956. 20	2, 463. 56	1, 332. 60
Santo Tomas Hospital.....	1, 058. 18	969. 45	950. 00
Medical storehouse.....	1, 031. 69	820. 06	657. 07
Total.....	40, 889. 59	40, 441. 71	46, 177. 35
District dentists.....	445. 52	6. 98	
Dispensaries:			
Naos Island.....	126. 95	178. 62	245. 54
Balboa.....	952. 29	1, 050. 21	935. 56
Corozal.....	521. 92	697. 66	612. 22
Pedro Miguel.....	416. 18	548. 43	399. 69
Paraíso.....	441. 92	641. 51	496. 46
Culebra.....		1. 90	676. 21
Empire.....			470. 83
Gamboa.....	124. 93	140. 68	116. 16
Gatun.....	465. 16	744. 09	483. 87
Cristobal.....			917. 32
Margarita Point.....			111. 04
Total.....	3, 494. 87	4, 010. 08	5, 465. 90
Sanitary division:			
General inspector.....	50. 00	50. 00	225. 00
Health office, Panama.....	3, 185. 35	3, 739. 00	2, 470. 36
Street cleaning.....	4, 202. 74	4, 273. 79	4, 889. 50
Health office, Colon.....	2, 225. 22	2, 322. 67	1, 627. 14
Street cleaning.....	2, 087. 92	2, 231. 89	1, 875. 29
Zone sanitation—			
Ancon.....	2, 519. 73	1, 525. 58	1, 825. 25
Balboa.....	4, 088. 45	2, 909. 40	2, 350. 97
Corozal.....	2, 030. 75	1, 666. 81	1, 526. 70
Pedro Miguel.....	2, 563. 72	2, 193. 53	1, 109. 32
Paraíso.....			1, 686. 18
Culebra.....	24. 58	381. 26	1, 076. 99
Empire.....			1, 554. 68
Frijoles.....	100. 06	100. 41	65. 00
Gatun.....	2, 736. 93	2, 188. 19	2, 615. 19
Cristobal and Mount Hope.....	1, 619. 22	1, 963. 75	3, 203. 96
Toro Point.....			369. 27
Total.....	27, 434. 67	25, 546. 28	28, 470. 80
Quarantine division:			
Chief quarantine office.....	209. 55	181. 75	
Balboa-Panama.....	1, 925. 91	1, 888. 74	
Colon-Cristobal.....	3, 120. 54	2, 889. 24	
Total.....	5, 256. 00	4, 959. 73	4, 669. 23
RECAPITULATION.			
Chief health office.....	475. 12	747. 66	2, 046. 81
Hospital division.....	40, 889. 59	40, 441. 77	47, 766. 71
Dispensaries.....	3, 494. 87	4, 010. 08	5, 465. 90
Sanitary division.....	27, 434. 67	25, 546. 28	28, 470. 80
Quarantine division.....	5, 256. 00	4, 959. 73	4, 669. 23
Total.....	77, 550. 25	75, 705. 46	88, 419. 45

July, 1915, last available figures.

TABLE XIII.--ANCON HOSPITAL.
REPORT OF NATIONALITY OF PATIENTS TREATED.

Class.	Total number treated.	Americans.		Other nations.	
		White.	Black.	White.	Black.
The hospital:					
Panama Canal employees.....	575	113	.....	46	416
Panama Railroad employees.....	209	16	.....	8	185
Panama Government pay cases.....	.....	.....	.....	.....	.....
Other pay cases.....	538	292	.....	80	166
Charity cases.....	96	19	.....	12	65
Total	1,418	440	.....	146	832
The insane asylum:					
Panama Canal employees.....	16	.....	.....	5	11
Panama Railroad employees.....	2	.....	.....	.....	2
Panama Government pay cases.....	184	.....	.....	11	170
Other pay cases.....	10	5	.....	2	3
Charity cases.....	57	4	.....	3	50
Total.....	269	9	.....	24	236
Grand total.....	1,687	449	.....	170	1,068
Soldiers.....	198	198	.....	.....	.....
Chronics.....	29	.....	.....	.....	29
Corozal farm.....	53	.....	.....	10	43

REPORT OF DAYS LOST IN HOSPITAL.

Class.	Total.	Americans.	Other white.	Black.
The hospital:				
Panama Canal employees.....	6,112	924	515	4,673
Panama Railroad employees.....	2,367	136	93	2,138
Panama Government pay cases.....	.....	.....	.....	.....
Other pay cases.....	4,944	2,513	935	1,496
Charity cases.....	1,161	219	86	856
Total .. .	14,584	3,792	1,629	9,163
The asylum:				
Panama Canal employees.....	448	.....	155	293
Panama Railroad employees.....	62	.....	.....	62
Panama Government pay cases.....	5,392	.....	399	4,993
Other pay cases.....	197	96	62	39
Charity cases.....	1,683	124	93	1,466
Total.....	7,782	220	709	6,853
Grand total.....	22,366	4,012	2,338	16,016
Soldiers.....	1,929	1,929	.....	.....
Chronics.....	762	.....	.....	762
Corozal farm.....	1,527	.....	310	1,217

Average cost of subsistence per patient per day, \$0.2252.

MONTHLY WARD LABORATORY REPORT.

Blood examinations, total number.....	618
Estivoautumnal.....	122
Quartan.....	1
Tertian.....	19
Differential counts.....	59
Hemoglobin estimations.....	90
Leucocyte counts.....	97
Red blood counts.....	3
Stool examinations, total number.....	509
Ameba.....	2
Ascaris lumbricoides.....	2
Cercomonas intestinalis.....	1
Ciliated monads.....	11
Guaiac tests.....	15
Pus and blood.....	81
Strongloides.....	17
Tenia saginata dispar (ova).....	1
Tricocephalus dispar.....	29
Uncinaria (ova).....	39
Urine examinations, total number.....	2,372
Albumen.....	443
Bile.....	10
Casts.....	372
Epithelia.....	703
Guaiac tests.....	15
Indicon.....	48
Pus and blood.....	759
Sugar (positive, 1; negative 21).....	22
Sputum examinations, total number.....	217
Positive for tubercle bacilli.....	31
Smear examinations, total number.....	23
Urethral.....	6
Varinal.....	2
Eye (2 positive).....	7
Spinal fluid.....	8

REPORT OF SURGICAL OPERATIONS.

	Number.	Died.
Amputations:		
Leg.....	1	.....
Multiple digits.....	1	.....
Operations on bones:		
Plating of fractures, simple.....	2	.....
Plating of fractures, compound.....	3	.....
Adenectomy:		
Inguinal, single.....	29	.....
Inguinal, double.....	9	.....
Femoral.....	1	.....
Herniotomy: Inguinal, single.....	18	.....
Genito-urinary tract:		
Nephrotomy.....	2	.....
Urethrotomy, external.....	3	.....
Prostatectomy.....	1	.....
Varicocele, radical cure.....	1	.....
Hydrocele, single radical cure.....	3	.....
Epididymotomy.....	6	.....
Amputation of scrotum.....	3	.....
Curetage uteri.....	5	.....
Trachelorrhaphy.....	1	.....
Obstetrical: Low forceps.....	2	.....

REPORT OF SURGICAL OPERATIONS—Continued.

	Number.	Died.
Thorax:		
Thoracotomy.....	1	1
Excision of breast and axilla.....	1	
Rectum:		
Hemorrhoids, radical cure.....	4	
Fistula in ano, excision of.....	2	
General:		
Varicose veins, excision of.....	1	
Skin graft.....	1	
Laparotomy:		
For tuberculous peritonitis.....	1	
For intestinal obstruction.....	2	
Appendectomy.....	10	
Appendectomy with local peritonitis.....	1	
Cholecystostomy.....	1	
Cholelithotomy.....	1	
Pan-hysterectomy.....	1	
Supravaginal hysterectomy.....	4	
Hysteromyomectomy.....	6	
Salpingo-oophorectomy.....	2	
Ovarian cystectomy.....	1	
Suspensio uteri.....	6	
For ectopic gestation.....	1	
Gunshot wound of abdomen.....	1	1
Major operations, various other.....	3	
Minor operations, various.....	120	
Total.....	262	2

REPORT OF OPERATIONS, EYE AND EAR DEPARTMENT.

Adenoidectomy.....	3
Submucous resection.....	8
Tonsillectomy.....	16
Mastoidectomy, simple.....	1
Enucleation of eye.....	1
Turbinectomy.....	1
Pterygium transplantation, single.....	4
Iridectomy.....	1
Cataract.....	3
Bowman's dilatation of lachrymal duct.....	1
Plastic:	
Face.....	1
Nose.....	1
Papilloma, vocal cords, removal of.....	2
Frontal sinusitis, radical.....	1
Expression for trachoma.....	1
Minor operations:	
Eye.....	18
Ear.....	8
Nose, etc.....	6
Total.....	77
Refractions.....	377

OUT-PATIENT DEPARTMENT.

	Total visits.	New cases.	Pay cases.	Prescrip- tions.
Medical clinic.....	280	193	56	269
Surgical clinic.....	225	134	14	36
Eye and ear clinic.....	758	238	58	418
Total.....	1,263	565	128	723

REPORT OF VACCINATIONS.

Adults vaccinated.....	27
"Takes".....	15
No school children vaccinated.	

REPORT OF BOARD OF HEALTH LABORATORY.

Bacteriological examinations of—	
Blood cultures.....	15
Throat cultures.....	56
Urines.....	35
Stool.....	19
Autopsies.....	2
Pathological fluids, exudates, etc.....	19
Sputum.....	4
Wassermann reactions.....	347
Agglutination reactions.....	7
Autogenous vaccines prepared.....	1
Vaccine points manufactured.....	2,808
Blood for malaria.....	4
Preparations of salvarsanized serum for intraspinal treatment.....	5
Chemical analysis of—	
Ancon Hospital dairy milk.....	2
Mother's milk.....	1
Urines.....	2
Kerosene.....	1
Commercial acetic acid.....	1
Bark.....	1
Purina dairy feed.....	1
Rice.....	1
Beans.....	1
Surgical tissues and neoplasms reported.....	22
Autopsies performed.....	34
Animals autopsied.....	5
Pathological tissues prepared:	
Paraffin.....	211
Frozen.....	18
Rats examined:	
<i>Mus musculus</i>	297
<i>Mus norvegicus</i>	530
<i>Mus alexandrinus</i>	6
<i>Mus rattus</i>	107
Bodies embalmed.....	4
Interments:	
At Corozal.....	40
Shipped to Mount Hope for burial.....	3

COROZAL HOSPITAL.

STATEMENT OF COMMITMENTS, DISCHARGES, AND DEATHS.

	Male.	Female.
Commitments:		
From Canal Zone, first admission.....	2	1
From Canal Zone, second admission.....		1
From Cana Zone, fifth admission.....	1	
	3	2
From Panama Government, first admission.....	4	1
From Panama Government, second admission.....	2	1
	6	2
Total.....	13	

	Well.		Improved.		Unimproved.	
	Male.	Female.	Male.	Female.	Male.	Female.
Discharges:						
Barbados.....	1	1				
Danish West Indies.....	1					
Dutch West Indies.....	1					1
Germany.....	1					
Guadeloupe.....		1				
Jamaica.....	1	2				
Panama.....	3	1				
Peru.....	1					
Trinidad.....	² 1					
United States of America.....					1	1
Total.....	10	5			1	1

Deaths.		Medical diagnosis.	Mental diagnosis.
Male.	Female.		
	1	Cancer of other organs.....	Psychoses with brain tumor.
	1	Other diseases of the kidneys.	Infective exhaustive psychoses.
	2		

¹ Deported.² Transferred to Ancon Hospital.

TABLE XIV.—COLON HOSPITAL.
NATIONALITY OF PATIENTS.

	White Ameri- can.	White foreign.	Black.	Total.
Panama Canal employees.....	21	14	59	94
Panama Railroad employees.....	14	2	53	69
Panama pay.....			21	21
Other pay.....	15	16	14	45
Charity cases.....	3	1	5	9
Total.....	53	33	152	238

Cost of subsistence per patient per day, 25 cents.

LABORATORY REPORT.

Blood examinations.....	167
Estivoautumnal.....	87
Tertian.....	5
Quartan.....	2
Lymphocytosis.....	2
Leucocytosis.....	14
Polisocytosis.....	5
Anisocytosis.....	5
Differential counts.....	2
Hemoglobin.....	2
Stool examinations.....	18
Blood and pus.....	10
Ciliated monads.....	1
Tricocephalus dispar.....	1
Ameba.....	2
Uncinaria.....	1
Blood and mucus.....	2
Urine examinations.....	102
Albumen.....	45
Casts.....	25
Pus and epithelium.....	41
Red blood cells.....	8
Triple ammonium phosphate.....	2
Amorphous phosphates.....	4
Sputum examinations.....	7
Positive for tubercle bacilli.....	2
Negative for tubercle bacilli.....	5
Smear examinations.....	8
Vaginal, diplococci.....	1
Urethral, gonococci.....	3
Eye, diplococci.....	2
Pleural exudate, pus (negative for tuberculosis).....	1
Breast, pus.....	1

SURGICAL OPERATIONS.

	Number.	Died.
Amputations: Leg.....	1	.....
Operations on bones: Laminectomy.....	1	.....
Adenectomy: Inguinal, double.....	1	.....
Herniotomy: Inguinal, single.....	3	.....
Genito-urinary tract: Hydrocele, single, radical cure.....	1	.....
Obstetrical: Version.....	1	1
Rectum: Hemorrhoids, radical cure.....	2	.....
General: Plastic operation for severe injuries.....	1	.....
Laparotomy:		
Exploratory.....	1	1
Appendectomy.....	3	.....
Cholecystostomy.....	1	.....
Minor operations, various.....	13	.....
Total.....	29	2

TABLE XV.—PALO SECO LEPER ASYLUM.

NATIONALITY OF PATIENTS.

Class.	Number treated.		Americans.		Others.	
	White.	Black.	White.	Black.	White.	Black.
Panama Canal employees.....	.....	.....	.....	.....	.....	.....
Panama Railroad employees.....	.....	.....	.....	.....	.....	.....
Pay cases.....	3	34	.....	.....	3	34
Charity cases.....	2	18	.....	.....	2	18
Total.....	5	52	.....	.....	5	52

Cost of subsistence per patient per day, 18 cents.

TABLE XVI.—SANTO TOMAS HOSPITAL.

Class.	Remain- ing Aug. 1.	Ad- mitted.	Dis- charged.	Died.	Remain- ing Aug. 31.
Pay cases.....	45	118	128	2	33
Charity cases.....	415	756	684	85	402
Total.....	460	874	812	87	435

Average number of patients constantly sick..... 448
 Total number of days' treatment..... 13,891
 Average number of days' treatment per patient..... 10
 Cost of subsistence per patient per day..... \$0.28

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Pay cases.....	163	3	.....	47	113
Charity cases.....	1,171	10	.....	133	1,028
Totals.....	1,334	13	.....	180	1,141

DISPENSARY REPORT.

Class.	White.	Colored.	Total.
Natives.....	90	340	430
Foreigners.....	86	840	926
Totals.....	176	1,180	1,356

DISEASES TREATED.

Malaria.....	95
Measles.....	27
Diphtheria and croup.....	2
Dysentery.....	10
Leprosy.....	1
Purulent infection and septicemia.....	9
Pellagra.....	5
Tuberculosis of the lungs.....	22
Tuberculous meningitis.....	1
Tuberculosis of other organs.....	1
Syphilis.....	28
Soft chancre.....	28
Gonococcus infection.....	25
Cancer and other malignant tumors of the breast.....	4
Cancer and other malignant tumors of the skin.....	2
Cancer and other malignant tumors of other organs and of organs not specified.....	5
Other tumors (tumors of the female genital organs excepted).....	5
Acute articular rheumatism.....	31
Anemia, chlorosis.....	1
Alcoholism (acute or chronic).....	13
Paralysis without specified cause.....	2
General paralysis of the insane.....	1
Other forms of mental alienation.....	7
Epilepsy.....	1
Hysteria.....	3
Neuralgia and neuritis.....	2
Other diseases of the nervous system.....	2
Diseases of the eyes and their annexa.....	1
Diseases of the ear.....	1
Pericarditis.....	1
Acute endocarditis.....	2
Organic diseases of the heart.....	18
Diseases of the arteries (atheroma, aneurysm, etc.).....	5
Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....	15
Diseases of the lymphatic system (lymphangitis, etc.).....	11
Hemorrhage, other diseases of the circulatory system.....	1
Diseases of the nasal fossae.....	4

Acute bronchitis.....	2
Chronic bronchitis.....	22
Broncho-pneumonia.....	5
Pneumonia.....	9
Pleurisy.....	5
Asthma.....	1
Diseases of the mouth and annexe.....	2
Diseases of the pharynx.....	7
Other diseases of the stomach (cancer excepted).....	7
Diarrhea and enteritis (under 2 years).....	8
Diarrhea and enteritis (2 years and over).....	7
Ankylostomiasis.....	15
Intestinal parasites.....	1
Appendicitis and typhlitis.....	4
Hernia, intestinal obstruction.....	18
Other diseases of the intestines.....	41
Biliary calculi.....	1
Diseases of the spleen.....	1
Acute nephritis.....	3
Bright's disease (chronic nephritis).....	13
Diseases of the urethra, urinary abscess, etc.....	7
Nonvenereal diseases of the male genital organs.....	6
Uterine tumor (noncancerous).....	6
Metritis.....	15
Other diseases of the uterus.....	1
Cysts and tumors of the ovary.....	1
Salpingitis and other diseases of the female genital organs.....	9
Nonpuerperal diseases of the breast (cancer excepted).....	2
Normal labor.....	72
Accidents of pregnancy.....	20
Puerperal septicemia.....	1
Furuncle.....	1
Acute abscess.....	14
Other diseases of the skin and annexe.....	32
Diseases of the bones (tuberculosis excepted).....	6
Diseases of the joints (tuberculosis and rheumatism excepted).....	9
Other diseases of the organs of locomotion.....	1
Congenital malformations (stillbirth not included).....	5
Newborn child.....	75
Congenital debility (icterus and sclerema).....	2
Other acute poisonings.....	3
Burns (conflagration excepted).....	3
Traumatism by firearms.....	3
Traumatism by cutting or piercing instruments.....	2
Traumatism by other crushings (vehicles, railroads, landslides, etc.).....	13
Fractures (causes not specified).....	13
Dislocations.....	1
No disease.....	22
Total.....	909

SURGICAL OPERATIONS.

	Number.	Died.
Amputations:		
Leg.....	1	1
Digits, multiple.....	3	
Ostectomy.....	1	
Adenectomy:		
Cervical.....	1	
Axillary.....	1	
Inguinal, single.....	3	
Herniotomy:		
Inguinal, single.....	8	
Double.....	2	
Ventral.....	5	
Strangulated.....	2	
Urethrotomy, external.....	2	
Varicocele, radical cure.....	1	
Hydrocele, single, radical cure.....	3	
Orchidectomy.....	1	
Amputation of penis.....	1	
Curetage uteri.....	3	
Excision of breast.....	2	
Excision of breast and axilla.....	1	
Hemorrhoids, radical cure.....	13	
Fistula in anus, excision of.....	3	
Excision of surface neoplasms.....	4	
Plastic operation for effects of disease.....	8	
Laparotomy for intestinal obstruction.....	1	1
Laparotomy, exploratory.....	2	
Gastroenterostomy.....	1	
Appendectomy.....	4	
Abscess of liver laparo-hepatotomy for.....	1	
Panhysterectomy.....	7	
Supravaginal hysterectomy.....	3	
Hysteromyomectomy.....	1	
Myomectomy.....	1	
Salpingectomy, double.....	3	
Salpingo-oophorectomy.....	2	
Suspensio-uteri.....	3	
Major operations, various other.....	6	1
Minor operations, various.....	25	
Total.....	129	3

TABLE XVII.—SANITATION.

The following is a summary of sanitary work performed and material expended during the month of August, 1915, in the Canal Zone:

Work requests on supply department:	
Grass cutting.....	19
Screening.....	5
Miscellaneous.....	13
Work requests on engineering department.....	6
Work requests on other departments.....	1
Notices served to abate nuisances.....	14
Arrests.....	0
Inspections of—	
Closets.....	1,542
Stores.....	43
Shops.....	85

Garbage cans emptied daily.....	84,448
Closets disinfected.....	2,259
Rat traps used daily.....	453
Adult Anopheles destroyed in houses.....	5,740
Adult Culices destroyed in houses.....	21,743
Larvacide used..... gallons.....	792
Crude oil used..... do.....	14,510
Kerosene used..... do.....	991
Rats destroyed.....	475
Containers with stegomyia larvæ found.....	1

SUMMARY OF ROUTINE WORK DONE BY THE HEALTH OFFICE, PANAMA.

Mosquito, rat, and fly work:	
Linear feet of ditches cleaned and maintained.....	20,480
Linear feet of new ditches dug.....	12,371
Number of cubic yards of earth used in filling.....	0
Gallons of larvacide used.....	689
Gallons of crude oil used.....	5,149
Square yards pools oiled.....	516,165
Water containers treated.....	15,154
Mosquito-breeding places found.....	194
Fly-breeding places found.....	130
Flies trapped (13,000 per quart)..... quarts.....	34
Number rats trapped.....	610
Number of room disinfections made.....	10
Garbage collection:	
Number loads garbage removed to dump.....	4,447
Number cubic yards garbage removed to dump.....	7,430
Total number of cans garbage emptied.....	108,135
Buildings:	
Number of buildings inspected.....	5,641
Number of plans for new buildings approved.....	16
Number of permits granted for repairs to old buildings.....	72
Total number of permits granted.....	88
Number of buildings condemned.....	7
Number of buildings demolished.....	4
Street cleaning:	
Average number of square yards cleaned daily.....	600,000
Average number of square yards streets sprinkled daily.....	90,000
Number private properties cleaned during month.....	13
Number of notices served and nuisances abated.....	248
Vaccinations:	
Number of vaccinations during month.....	797
Total number of vaccinations since Apr. 1, 1914.....	23,244

WORK REPORT FOR COLON, CRISTOBAL, AND MOUNT HOPE.

[Health office, Cristobal, Aug. 31, 1915.]

Sanitation, general, Colon:	
Square yards streets cleaned.....	4,501,752
Square yards alleys maintained.....	676,000
Number of private properties cleaned.....	124
Cubic yards fumigated.....	6,048
Mosquitoes caught:	
Anopheles.....	282
Culex (relief work).....	831
Number of dogs killed.....	11
Number of rats caught.....	342
Loads yard garbage disposed of.....	580
Number of cans, garbage (2,234 cubic yards).....	66,308
Colon dump maintained.....	
Linear yards ditches maintained.....	3,478
Square yards vegetation removed:	
Panama Railroad property (76½ acres).....	441,470
Cristobal and Camp Bied (6 acres).....	29,040

Sanitation, general, Colon—Continued.

Parkway and E Street maintained.	
Square yards oiled.....	39,640
Number of buildings inspected.....	3,010
Number receptacles treated.....	24,697
Number of mosquito-breeding places destroyed.....	83
Number of fly-breeding places destroyed.....	40
Gallons larvacide used in Colon and E Street.....	267½
Gallons crude oil used in Colon and E Street.....	741
Number nuisances abated.....	124

Building, Colon:

Number of plans approved.....	17
Number of permits to occupy issued.....	2
Number of permits to repair issued.....	78
Number of bills collected.....	65

Sewers, Colon:

Number of new connections made during month.....	2
Total number connections made to date.....	1,188
Number of houses in which extensions were made.....	2
Outstanding permits.....	88

Sanitation, Cristobal:

Number of cans, garbage (723 cubic yards).....	13,077
Loads of yard garbage handled.....	175
Square yards vegetation removed.....	29,040
Square yards oiled.....	14,750
Number of receptacles treated.....	3,800
Number of mosquito-breeding places destroyed.....	53
Number of fly-breeding places destroyed.....	11
Gallons larvacide used.....	59
Gallons crude oil used.....	252
Number of buildings inspected.....	350

Sanitation, Mount Hope:

Number of cans, garbage (186 cubic yards).....	1,860
Square yards oiled.....	161,900
Number of receptacles treated.....	14,850
Number of mosquito-breeding places destroyed.....	186
Number of fly-breeding places destroyed.....	
Number of mosquitoes caught in barracks:	
Anopheles.....	121
Culex.....	2,297
Number of mosquitoes caught in cars and quarters (village):	
Anopheles.....	2,296
Culex.....	3,312
Gallons larvacide used.....	476
Gallons of crude oil used.....	1,385.54
Mount Hope Cemetery maintained.....	
Linear yards ditches constructed (901 cubic yards).....	3,182
Linear yards ditches maintained.....	12,642
Square yards vegetation removed.....	202,782
Number of burials during the month.....	54

TABLE XVIII.—CONSOLIDATED REPORT OF QUARANTINE TRANSACTIONS AT THE PORTS OF BALBOA-PANAMA AND COLON-CRISTOBAL.

Number of vessels inspected and passed.....	208
Number of vessels held in quarantine.....	13
<hr/>	
Total number of vessels entered.....	221
Supplementary inspections of vessels detained.....	7
Number of vessels fumigated on arrival.....	10
Number of vessels fumigated on departure.....	2
<hr/>	
Total number of vessels fumigated.....	12
Number of crew examined.....	14,814
Number of passengers examined (including 162 United States troops).....	4,900
<hr/>	
Total number of persons examined.....	19,714

Number of supplementary inspections.....		1,031
Number of persons vaccinated at ports of arrival because of compulsory vaccination law.....	790	
Number of persons vaccinated at ports of departure or en route because of compulsory vaccination law.....	715	
Total number of persons vaccinated.....		1,505
Number of persons held in quarantine at the detention houses to complete period of incubation of yellow fever and plague.....	279	
Number of persons held in quarantine on board vessels to complete period of incubation of yellow fever and plague.....	1,872	
Total number of persons held under observation.....		2,151
Total number of persons landed from foreign ports:		
Cabin.....	2,079	
Steerage.....	1,198	
Total number of persons embarked for foreign ports:		3,277
Cabin.....	2,100	
Steerage.....	1,240	
Total number of persons arriving from coast towns on small launches and sailing craft.....	2,160	3,340
Total number of persons sailing for coast towns on small launches and sailing craft.....	1,587	
Apparent increase for month from coast towns.....		573
Apparent decrease for month from foreign ports:		
Cabin.....	21	
Steerage.....	42	
		63
Number of immigrants recommended for deportation.....		49
Number of bills of health issued or viséed.....		176
Number of inspections of docks.....		25
Number of inspections of vessels at docks.....		169
Total number of persons landed.....	5,437	
Less number for Pacific ports.....	219	
		5,218
Total number of persons sailing.....		4,927
Total apparent increase for month.....		291

IMMIGRATION REPORT FOR COLON.

From—	Cabin.	Steerage.
Europe.....	33	13
United States.....	799	121
Jamaica and West Indies.....	103	357
Venezuela.....	16	
Colombia.....	59	99
Cuba.....	42	15
Costa Rica.....	142	36
Bocas del Toro.....	42	445
Coast towns.....		235
Total.....	1,236	1,321

Men.....	1,426
Women.....	609
Children.....	287
Unclassified.....	235
Total.....	2,557

QUARANTINE, BOCAS DEL TORO.

Number of vessels inspected and passed.....	20
Number of crew inspected and passed.....	1,330
Number of passengers inspected and passed.....	198
Number of passengers, in transit, inspected and passed.....	196

No quarantinable diseases has appeared in this port, and the health conditions of the port and surrounding territory are good.

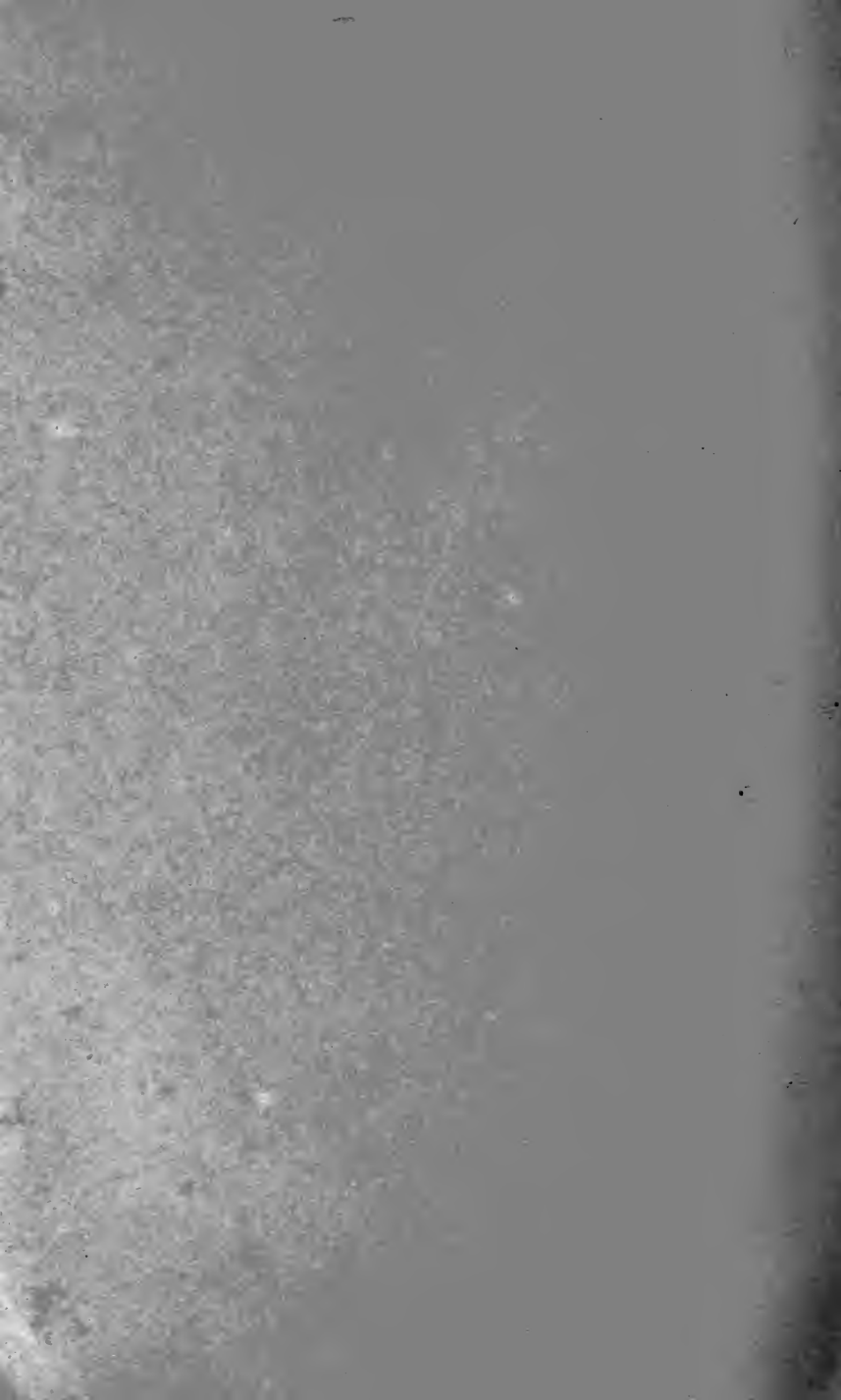
TABLE XIX.—STATEMENT OF QUININE ISSUED.

	Kilos.
Quinine sulphate.....	27.0
Quinine sulphate tablets.....	6.2
Total.....	43.2
Pounds avoirdupois, 95.24.	

TABLE XX.—PERSONNEL REPORT.

	August, 1915.		Total.	July, 1915, total.	August, 1914, total.
	Officers and em- ployees.	Skilled and un- skilled labor.			
Chief health office.....	4	.....	4	4	13
Medical storehouse.....	4	4	8	10	8
Quarantine division.....	25	18	43	42	42
Health office, Parama.....	20	153	173	160	150
Health office, Colon.....	17	150	167	159	157
Ancon Hospital.....	221	102	323	341	376
Colon Hospital.....	26	8	34	34	37
Santo Tomas Hospital.....	4	.....	4	5	5
Palo Sero Leper Asylum.....	12	23	35	32	18
Zone sanitation.....	20	106	126	113	118
Hospital farm.....	4	41	45	50	51
Dispensaries:					
Balboa.....	6	.....	6	6	6
Corozal.....	4	.....	4	4	4
Culebra.....	.....	.....	.....	.....	2
Empire.....	.....	.....	.....	.....	5
Gamboa.....	1	.....	1	1	1
Gatun.....	4	.....	4	4	4
Margarita Point.....	.....	.....	.....	.....	1
Naos.....	1	.....	1	1	1
Paraiso.....	4	.....	4	4	4
Pedro Miguel.....	3	.....	3	3	3
Total.....	380	605	985	973	1,006





UNIVERSITY OF FLORIDA



3 1262 08520 1282